

### **IN THE CLAIMS**

Please amend the claims as follows:

1. (Currently Amended)      An optical transponder comprising:  
        a first TO can having a first insulating base, a photodetector mounted on a first side of the first insulating base, and a metal cap hermetically sealed to the first side of the first insulating base to enclose the photodetector; and  
        a second TO can having a second insulating base, a light generation device mounted on a first side of the second insulating base, and a metal cap hermetically sealed to the first side of the second insulating base to enclose the light generation device, wherein the first and second TO cans are within a transponder housing.
2. (Original)    The optical transponder of claim 1, wherein the first and second insulating bases are physically coupled to a heat sink.
3. (Original)    The optical transponder of claim 2, wherein the first and second insulating bases are physically coupled to a metal housing of the optical transponder, and the metal housing serves as a heat sink.
4. (Original)    The optical transponder of claim 3, wherein the first and second insulating bases have at least one flat side.
5. (Original)    The optical transponder of claim 3, wherein the optical transponder has an impedance of approximately 50 ohms.
6. (Original)    An optical transponder comprising:  
        an optical receiver housed in a first TO can, the optical receiver capable of receiving optical signals at a rate of at least 10 Gb/s; and

an optical transmitter housed in a second TO can, the optical transmitter capable of transmitting optical signals at a rate of at least 10 Gb/s, wherein the optical receiver and the optical transmitter each have an insulating base, and each of the insulating bases have a plurality of electrical leads running through the insulating base into an interior of the optical receiver and the optical transmitter, respectively.

7. (Original) The optical transponder of claim 6, wherein the insulating bases are coupled to a heat sink.

8. (Original) The optical transponder of claim 7, wherein a housing of the optical transponder serves as the heat sink.

9. (Original) The optical transponder of claim 6, wherein the first and second TO cans have an impedance of approximately 50 ohms.

10. (Original) An optical transponder comprising:

an optical receiver housed in a first TO can to receive an optical signal at a rate of 10 Gb/s, the first TO can comprising a first insulating base having a first surface on an interior of the first TO can to which the optical receiver is attached and having an opposite surface on an exterior of the first TO can;

an optical transmitter housed in a second TO can to transmit optical signals at a rate of 10 Gb/s, the second TO can comprising a second insulating base having a first surface on an interior of the second TO can to which the optical transmitter is attached and an opposite surface on an exterior of the second TO can.

11. (Original) The optical transponder of claim 10, wherein the first and second TO cans have an impedance of approximately 50 ohms.